We claim:

1. A method to monitor the response of a patient being treated for cancer by administering an anti-cancer agent, comprising the steps of:
   (a) determining the level of expression of one or more proteins in a first biological sample taken from the patient prior to treatment with the anti-cancer agent;
   (b) determining the level of expression of one or more proteins in at least a second biological sample taken from the patient subsequent to the treatment with the anti-cancer agent; and
   (c) comparing the level of expression of one or more proteins in the second biological sample with the level of expression of one or more proteins in the first biological sample;

   wherein a change in the level of expression of one or more proteins in the second biological sample compared to the level of expression of one or more proteins in the first biological sample indicates the efficacy of the treatment with the anti-cancer agent.

2. The method of claim 1, wherein said anti-cancer agent is a Raf kinase inhibitor.

3. The method of claim 1, wherein said protein is pERK.

4. The method of claim 1, wherein said cancer is selected from lung cancer, renal cancer, pancreatic cancer, liver cancer, gastrointestinal cancer, thyroid cancer, ovarian cancer, breast cancer, prostate cancer, and melanoma.

5. The method of claim 1, wherein the protein expression level is assessed by immunohistochemistry.

6. The method of claim 1, wherein said sample is a tumor biopsy.

7. A method for providing a patient diagnosis for cancer, comprising the steps of:
   (a) determining the level of expression of one or more proteins in a first biological sample taken from the patient;
   (b) determining the level of expression of one or more proteins in at least a second biological sample taken from a normal patient sample; and
   (c) comparing the level of expression of one or more proteins in the first biological sample with the level of expression of one or more proteins in the second biological sample;

wherein a change in the level of expression of one or more proteins in the first biological sample compared to the level of expression of one or more proteins in the second biological sample is a diagnostic of the disease.

8. The method of claim 7, wherein said protein is pERK.

9. The method of claim 7, wherein said cancer is selected from lung cancer, renal cancer, pancreatic cancer, liver cancer, gastrointestinal cancer, thyroid cancer, ovarian cancer, breast cancer, prostate cancer, and melanoma.

10. The method of claim 7, wherein the protein expression level is assessed by immunohistochemistry.

11. The method of claim 7, wherein said sample is a tumor biopsy.

12. A method for distinguishing between normal and disease tissues, comprising the steps of:
(a) determining the level of expression of one or more proteins in a first biological sample of a disease tissue;
(b) determining the level of expression of one or more proteins in at least a second biological sample taken from normal tissue; and
(c) comparing the level of expression of one or more proteins in the first biological sample with the level of expression of one or more proteins in the second biological sample;

wherein a change in the level of expression of one or more proteins in the first biological sample compared to the level of expression of one or more proteins in the second biological sample is indicative of a disease state.

13. The method of claim 12, wherein said protein is pERK.

14. The method of claim 12, wherein the protein expression level is assessed by immunohistochemistry.

15. A method for discovering novel drugs for the treatment of cancer, comprising the steps of:
(a) determining the level of expression of one or more proteins in a first tumor cell sample prior to treatment with the anti-cancer agent;
(b) determining the level of expression of one or more proteins in at least a second tumor cell sample subsequent to the treatment with the anti-cancer agent; and
(c) comparing the level of expression of one or more proteins in the second tumor cell sample with the level of expression of one or more proteins in the first tumor cell sample;

wherein a change in the level of expression of one or more proteins in the second tumor cell sample compared to the level of expression of one or more proteins in the first tumor cell sample indicates the efficacy of the anti-cancer agent.

16. The method of claim 15, wherein said protein is pERK.

17. The method of claim 15, wherein the protein expression level is assessed by immunohistochemistry.

18. The method of claim 15, wherein said tumor cells are selected from lung cancer, renal cancer, pancreatic cancer, liver cancer, gastrointestinal cancer, thyroid cancer, ovarian cancer, breast cancer, prostate cancer, and melanoma.

19. A method for selecting patients eligible for anti-cancer treatment, comprising the steps of
(a) determining the level of expression of one or more proteins in a first biological sample taken from a patient;
(b) comparing the level of expression of one or more proteins in the first biological sample with the level of expression of one or more proteins in a second biological sample taken from a normal patient sample;

wherein a change in the level of expression of one or more proteins in the first biological sample compared to the level of expression of one or more proteins in the second biological sample is a prognostic of that patient's response to anti-cancer treatment.

20. The method of claim 19, wherein said anti-cancer agent is a Raf kinase inhibitor.

21. The method of claim 19, wherein said protein is pERK.

22. The method of claim 19, wherein the patient has been diagnosed with cancer is selected from lung cancer, renal cancer, pancreatic cancer, liver cancer, gastrointestinal cancer, thyroid cancer, ovarian cancer, breast cancer, prostate cancer, and melanoma.

23. The method of claim 19, wherein the protein expression level is assessed by immunohistochemistry.

24. The method of claim 19, wherein said sample is a tumor biopsy.

25. A kit comprising a primary antibody directed to pERK, a secondary antibody, reagents, reference samples, and control samples.